

REMARKS

The specification was amended to correspond more closely to the claims as originally filed. No new matter was added. Claims 1-16 are pending in the application.

Claims 14 and 15 were rejected under 37 C.F.R. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicants respectfully disagree. The claims are part of the specification as filed. The specification has now been amended to include the same language as used in the originally filed claims. In establishing a disclosure, an applicant may rely not only on the description as filed but also on the original claims. *See, MPEP § 608.01(I)*. There is further description at least on page 5 of the specification. According to the Office Action, there are no examples of use of the claimed invention on a mammal other than a human and the specification does not provide a written description of the method of treatment of the claimed invention. However, it is not required that examples be presented of every possible embodiment of the invention. There is a description in the specification of the invention as set forth in claims 14 and 15. The examples included in the specification provide information necessary to use the invention with mammals other than humans such as cats and dogs. *See MPEP § 2164.02*. In view thereof, Applicants respectfully request that this rejection be withdrawn.

Claims 8 and 12 were rejected under 37 C.F.R. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicants respectfully traverse this rejection.

According to the Office Action, the language "and other cosmetically useful additives" makes claims 8 and 12 indefinite. Definiteness must be analyzed in light of the content of the application disclosure, the teachings of the prior art and the claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the

time the invention was made. In this case, one of skill in the art of cosmetics would readily recognize the types of additives indicated by this term. Moreover, such terms are recognized in the art such that one of skill in the art could properly interpret the claim. *See, for example, U.S. Patent No. 5,720,949 and U.S. Patent No. 5,624,664.* In view thereof, Applicants respectfully request that this rejection be withdrawn.

Claims 1-8 and 14-16 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Witbeck et al., U.S. Patent No. 5,508,027 in further view of Bonfield et al., U.S. Patent No. 5,728,753. Applicants respectfully traverse this rejection.

Claim 1 is directed to a method for treating nails and adjacent issues comprising applying a composition comprising an effective, nail-enhancing amount of non-interlinked particles of bioactive glass to the nails for a suitable amount of time. Independent claim 14 is directed to a method for treating nails and adjacent tissues in mammals other than humans comprising applying a composition comprising an effective, nail-enhancing amount of non-interlinked particles of bioactive glass to the nails for a suitable amount of time. Independent claim 16 relates to a method for treating nails and adjacent tissues comprising applying a composition comprising an effective, nail-enhancing amount of bioactive extract to the nails for a suitable amount of time. These methods allow enhancement of the hardness and durability of the nail body and also the health of the surrounding tissues.

Witbeck relates to methods and compositions for strengthening nails by the periodic application of synthetic gums of acrylic polymer films on the nail body. The compositions may contain an alkali metal base and a volatile fragrance. The process and compositions of Witbeck involve the use of polymers and films to coat nails.

Bonfield relates to a bioactive composite material for the repair of hard and soft tissues. The compositions contain a combination of a polyolefinic binder with certain bioactive glass materials. The composites bond actively with soft tissues, and facilitate the production of implants tailored for highly specific medical requirements.

According to the Office Action, it would have been obvious to one having ordinary skill in the art to use the teachings of Bonfield with regard to using bioactive glass as a component in a composition to repair nails and soft tissue in the teaching of Witbeck. Applicants respectfully disagree.

Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. *In re Fine*, 5 USPQ2d 1596 (Fed. Cir. 1988). No such motivation to combine the cited patents is found here. Neither Witbeck nor Bonfield provides any motivation to make the combination suggested in the Office Action. Witbeck is specifically directed to a particular polymer composition for use on nails but does not refer or suggest the use of any different material, particularly a bioglass material. Bonfield refers to the use of a bioglass composition for implants but does not refer to or suggest its use on nails. Thus, Witbeck relates to a coating which strengthens the nail while Bonfield relates to implants. Neither, either alone or in combination, suggests a method using non-interlinked particles of bioactive glass which allows a layer of hydroxyapatite to form on the nail as provided by the present invention.

As stated in *Ecolchem, Inc. v. Southern California Edison Co.*, 227 F.3d 1361, 56 USPQ2d 1065 (Fed. Cir. 2000):

Our case law makes clear that the best defense against hindsight-based obviousness analysis is the rigorous application of the requirement for a showing of a teaching or motivation to combine the prior art references...Combining prior art references without evidence of such a suggestion, teaching, or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability—the essence of hindsight.

(citations omitted.)

Thus, without a suggestion to modify Witbeck with Bonfield as indicated in the Office Action, such a combination is improper and results in impermissible hindsight. In view of the differences between the cited art and the claimed invention and the lack of motivation or suggestion to modify the cited patents to arrive at the present invention, Applicants respectfully request that this rejection be withdrawn.

Claims 11-13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Witbeck et al., U.S. Patent No. 5,508,027 and Bonfield et al., U.S. Patent No. 5,728,753, in further view of Zook, U.S. Patent No. 5,181,914. Applicants respectfully traverse this rejection.

Claim 11 relates to a medicating device for application to the nails comprising a viscoelastic gel pad which conforms to the shape of the nail, wherein the pad is impregnated with non-interlinked particles of bioactive glass and an aqueous solution. Zook relates to a medicating device for nails and adjacent tissues which includes a transparent viscoelastic gel pad having one or more pharmacologically-active substances incorporated therein.

As set forth above, there is no motivation to combine the primarily cited patents to arrive at a method for treating nails and adjacent tissues comprising applying a composition comprising an effective, nail-enhancing amount of non-interlinked particles of bioactive glass to the nails for a suitable amount of time. Likewise, Witbeck and Bonfield cannot be combined without improper hindsight reconstruction to obtain the claimed device of claim 11 which allows for the application to nails of a pad with non-interlinked particles of bioactive glass and an aqueous solution. Witbeck does not teach or suggest the use of bioactive glass and Bonfield does not teach a composition for use with nails as claimed. Neither patent suggests the combination indicated in the Office Action. Thus, the addition of Zook does not aid in making the claimed invention obvious to one of skill in the art. Therefore, Applicants respectfully request that this rejection be withdrawn.

Claim 9 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Witbeck et al., U.S. Patent No. 5,508,027 and Bonfield et al., U.S. Patent No. 5,728,753, in further view of Shepherd et al., U.S. Patent No. 3,914,405. Applicants respectfully traverse this rejection.

Claim 9 is directed to a method for treating nails and adjacent tissues as in claim 1 and further comprising removing the bioactive glass from the nail surface. Shepherd describes a manicure composition containing a hydrophilic polymer, a coloring agent and solvent. The manicure coatings may be removed by washing the hands. The addition of Shepherd to the combination of Witbeck and Bonfield would not have made the present invention obvious in view of the above discussion of the lack of motivation to combine the two primary patents. In view thereof, Applicants respectfully request that this rejection be withdrawn.

Claim 10 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Witbeck et al., U.S. Patent No. 5,508,027 and Bonfield et al., U.S. Patent No. 5,728,753, in further view of LeGrow, U.S. Patent No. 5,403,402. Applicants respectfully traverse this rejection.

Claim 10 is directed to a method as in claim 9 further comprising applying a protective lacquer coating on the nails following removal of the bioactive glass from the nail surface. LeGrow teaches a method of removing a coating from surfaces and states that a nail polish remover is used to remove traces of prior nail lacquer coatings or residues from soap and hand creams, before a new nail lacquer is applied to the fingernails or toenails.

As with the previous rejections, the cited combination of patents would not have made the claimed invention obvious to one of skill in the art since neither Witbeck nor Bonfield contain teachings or suggestions that would have led one to the claimed invention. As discussed above, there must be some suggestion or motivation to combine art but none exists here. In view thereof, Applicants respectfully request that this rejection be withdrawn.

Applicants note that a Second Supplemental Information Disclosure Statement was submitted October 26, 2000, and respectfully request that an initialed copy of the PTO-1449 form submitted therewith be returned with the next action in this application.

Applicants believe they have responded to all matters raised in the above referenced Office Action and that the application is now in condition for allowance. If the Examiner has any questions concerning this Application or this Reply and Amendment, she is invited to contact the undersigned.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

By: Mary B. Grant
Mary B. Grant
Registration No. 32,176

P.O. Box 1404
Alexandria, Virginia 22313-1404
(919) 941-9240

Dated: 12/21/00